

Date: Thu, 2 Jun 94 14:00:25 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #612
To: Info-Hams

Info-Hams Digest Thu, 2 Jun 94 Volume 94 : Issue 612

Today's Topics:

(none)
440 in So. Cal.
6JS6C's available? \$\$
Bizarre QST statement
commercial radio exam
Dallas Ham fest?
Loop Antenna (4 msgs)
N. Colorado Hamfest
N7RO QSL bureau
NICAD CHARGING
RE:Loop Antenna
Software
Speech Processor
TI9JJP / QSL

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Jun 94 20:34:46 GMT
From: news-mail-gateway@ucsd.edu
Subject: (none)
To: info-hams@ucsd.edu

subscribe

Date: Thu, 2 Jun 1994 16:16:10 GMT
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!llyene!laborde@network.ucsd.edu
Subject: 440 in So. Cal.
To: info-hams@ucsd.edu

In article <2sie9u\$nvk@lo-fan.jpl.nasa.gov>,
Randy Hammock <hammock@kelvin.jpl.nasa.gov> wrote:
>these bands. Now, that 2 meters has become even more congested, people are
>looking to more fertile landscape, only to find that it is already occupied.
>(sounds a bit like the settlers verses the indians.) They talk of outlawing
>the systems that are present. Restricting what they can do. (Move the closed
>systems off to the reservations.) Jeez, people never learn.

You're right, Randy, but unfortunately this is the way of the world. The early pioneers moved out west to get the wide open land there. As it became more and more accessible, "regular people" began to clamor for that land, and by force of sheer numbers, they got it. Eventually there was no more open space left (watch out, Canada!), and the US is/was forced to learn to operate within the new constraints. This is/will happen with radio spectrum as well. We can argue until we are blue in the face about what is right and wrong, but it would be a BIG mistake to let an attitude of righteousness open us up to being caught with our pants down when reality hits. Like it or not, the frontier of 440 has become accessible, and "regular people" are moving in. The mindless mass of people will not be affected by rational argument, so what exactly is the point of this exercise? They will take what they want, and it is we who will have to adjust to them. All the tantrums in the world (well documented on rec.radio.amateur.misc) will not affect that, so what are WE going to do to maintain systems that we like in the face of it?

And why isn't the JPLARC on 1.2GHz?

-Greg

Date: Thu, 02 Jun 94 14:57:50 CST
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!newsxfer.itd.umich.edu!gumby!wupost!slacc.com!wbrco@network.ucsd.edu
Subject: 6JS6C's available? \$\$
To: info-hams@ucsd.edu

-=> Quoting Internet: Harrisok@vax.so to ** All ** <=-

IH>

IH> Just out of curiosity, how tough is it to find 6JS6C tubes, anyway? I

Believe it or not, you can still get them from RS (if you can find a salesman that knows what they are) 6JS6 is a sweep tube and is still fairly common. They were also used in Tempo 1's

... "What?!? This isn't the Files section?!?"

___ Blue Wave/QWK v2.12 OS/2

SLACC STACK BBS - St. Louis, Missouri

The bulletin board service of the St. Louis Area Computer Club

+1 314.367.1903

Date: 2 Jun 94 18:44:25 GMT

From: sdd.hp.com!col.hp.com!srigenprp!alanb@hplabs.hpl.hp.com

Subject: Bizarre QST statement

To: info-hams@ucsd.edu

Greg Bullough (greg@netcom.com) wrote:

: ... I was

: always surprised that Drake elected to stick with the sweep-tube final,
: when they could have easily shifted to 6146's (or something more exotic,
: and perhaps just one of them), especially when they were notably on the
: high end, both in quality and price...

When I was at Drake, I was not involved in the TR4/T4X designs (just a tad before my time :=), but I talked with folks who were. They evidently did a bunch of reliability testing on various tube types and found that the sweep tubes (at least the types they used) had good reliability compared with 6146's.

AL N1AL

Date: 2 Jun 1994 13:26:49 -0600

From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!spool.mu.edu!mnemosyne.cs.du.edu!nyx.cs.du.edu!not-for-mail@network.ucsd.edu

Subject: commercial radio exam

To: info-hams@ucsd.edu

The Hartford (CT) Test Center of National Radio Examiners will conduct testing for commercial radio operator licenses on Sat, June 11, at a location in the Hartford area. Exams for FCC elements 1, 3 and 9 are currently available through this privatized testing program. For further details on this upcoming exam opportunity on June 11 (or future

exam opportunities, pse contact me via e-mail (internet or MCI Mail) or by telephone at 203-722-2358.

73.

Robert Halprin, (K1XA), Hartford Test Center Mgr.
National Radio Examiners.
S

Date: Thu, 2 Jun 1994 17:01:29 GMT
From: seas.smu.edu!vivaldi!rsd0!usenet@uunet.uu.net
Subject: Dallas Ham fest?
To: info-hams@ucsd.edu

In article <dbmartinCqxxqn.AE7@netcom.com> dbmartin@netcom.com (David Martin) writes:

>I am looking for some information about a Ham fest that will be hold in
>the Dallas Tx area in June. Does anyone know where and when?

June 10-12. Arlington Convention Center, Arlington, TX.

dave

=====

| | |
|----------------------|-------------------------------|
| Dave Rogers | Internet: dave@rsd.dl.nec.com |
| M & R Software, Inc. | CIS: 76672,2455 |

In the absence of leadership, we have decided to follow ourselves.

Date: Thu, 2 Jun 1994 17:54:04 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!darwin.sura.net!news.Vanderbilt.Edu!news@network.ucsd.edu
Subject: Loop Antenna
To: info-hams@ucsd.edu

Tom,

Just don't forget that any compact antenna will NEVER outperform a fullsized antenna. You MAY get the antenna to accept power but that's where it will stay! Just a dummy load in the air!!

The periodicals are great about telling you just how much fun you can have building small and cheap but thay don't say just how it compares to the real thing.

Good DX,
K5WIM

Date: 2 Jun 94 19:19:00 GMT
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!library.ucla.edu!news.mic.ucla.edu!
MVS.OAC.UCLA.EDU!CSMSCST@ucbvax.berkeley.edu
Subject: Loop Antenna
To: info-hams@ucsd.edu

In article <1994Jun2.175404.6920@news.vanderbilt.edu>,
PFEIFFEM@ctrvx1.Vanderbilt.Edu (PFEIFFEM_1) writes:

>Tom,
> Just don't forget that any compact antenna will NEVER outperform a fullsized
>antenna. You MAY get the antenna to accept power but that's where it will
>stay! Just a dummy load in the air!!
> The periodicals are great about telling you just how much fun you can have
>building small and cheap but thay don't say just how it compares to the real
>thing.
>
> Good DX,
> K5WIM

Gee, I guess the 240 (confirmed) countriies that I've gotten with my
small loop and 150w in the last 3 yrs don't count ...

What's attached to the key/mic is at least as important as what's
attached to the antenna connector...

-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

Date: 2 Jun 1994 19:27:47 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!eff!news.duke.edu!duke.edu!jbs@network.ucsd.edu
Subject: Loop Antenna
To: info-hams@ucsd.edu

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PFEIFFEM@ctrvx1.Vanderbilt.Edu (PFEIFFEM_1) writes:

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>stay! Just a dummy load in the air!!
> The periodicals are great about telling you just how much fun you can have
>building small and cheap but thay don't say just how it compares to the real
>thing.
>
> Good DX,
> K5WIM

Truly spoken like someone who's never used a small loop antenna.

My friend Rob, WA3ULH, the author of the article that ran in QST, has demo'd his loop for me and it works quite well. It doesn't quite hang with his A3S, but its performance is just about as good as he gets with his R7 (which is on the roof, not in the house where his loop is). And for about \$30 in parts, you really can't beat it for a multiband portable antenna. His "dummy load in the air" makes a hell of a lot of QRP contacts for him.

-joe

KD4LLV

--

"When personal freedom's being abused, you have to move to limit it."

- U.S. President Bill Clinton, 1994

Date: 2 Jun 94 19:39:43 GMT
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!aries!
hawley@network.ucsd.edu
Subject: Loop Antenna
To: info-hams@ucsd.edu

ignacy@misz.animal.uiuc.edu (Ignacy Misztal) writes:
>There are exceptions to the rule than full-size is always better.
>Suppose you compare a low-lying full-size dipole with a tuned loop.
>The loop can be >80% efficient, and with vertical polarization has
>lower angle of radiation. If rotated, it won't have null areas like
>the dipole. Thus it may outperform the full-size dipole.
>Once I compared with an attic dipole (20 ft up) and a home-made loop
>(6 ft up, 3.5 ft diameter) on 17m. While ordinarily there was little
>difference in signal strengths, there was a large difference when the
>band was closing. Namely stations that could be heard comfortably
>with the loop were buried in noise with the dipole.

What's the pattern of a small loop? How does it matter if you turn it horizontal or vertical? Most of the ads show the AEA horizontal, and the MFJ vertical.

Chuck Hawley.....KE9UW.....Urbana, Illinois
hawley@aries.scs.uiuc.edu
School of Chemical Sciences, Electronic Services

University of Illinois, Urbana-Champaign

Date: 2 Jun 94 18:27:03 GMT
From: sdd.hp.com!col.hp.com!fc.hp.com!rogerm@hplabs.hpl.hp.com
Subject: N. Colorado Hamfest
To: info-hams@ucsd.edu

There will be a hamfest at the Larimer County Fairgrounds in Loveland, Colo. on Saturday, June 11, 1994 starting at 8 AM. The Superfest is sponsored by the Northern Colorado Amateur Radio Club. Call-in and info is on 145.115 Mhz - offset 100Hz PL.

Roger Mitchell
NOMCR
President and Master Mechanic
Fort Collins Municipal Railway

Date: Thu, 2 Jun 1994 18:14:53 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!
slay@network.ucsd.edu
Subject: N7RO QSL bureau
To: info-hams@ucsd.edu

Barry Kutner (barry@w2up.wells.com) wrote:

: Derek - I think you are missing my point (sort of). The two I mentioned
: are profiteers. DJ6SI (and some others) are professional DXpeditioners.
: They make a nice living by going to places (yes, some rare) and raking in
: the bucks for QSLs. It's one thing to contribute voluntarily for an
: expedition (which I frequently do). It's another to "extort" money by
: REQUIRING a donation for a QSL. This practice should be banned on
: ethical grounds by ARRL.

: Let see how fast these guys change their
: practices if their expeditions don't count for DXCC.

An example of changing their practices: they STOP going on DXpeditions?

Would that be a bad thing? IMHO, yes. Just how much money "raking in the bucks" do you figure a guy like DJ6SI makes (NET) anyway?
Should we prohibit DXpeditioners from collecting any funds whatsoever?
Why be so concerned that somebody is making some money? Is there a problem in helping, whether by request or demand, to make a contribution to the costs of his going to some out-of-the-way locale?

How much "fun" is there in going to VP8SSI where the DXpeditioners came close to becoming premature silent keys? We're not always talking about stopping of in some wonderful tropical island with a three or four star hotel, ya know.

How's about we let these guys go off to Peter 1 or wherever Baldur wants to go then, instead of sending in money for a QSL .. we simply give up the whole practice of QSling for DXCC? That's right, let's use the "honor system". If you say you worked 'em on 160m - that good enough! It gets rid of the (relatively) high cost of QSling AND saves a lot of time in updating your DXCC totals.

Cheers de, Sandy
WA6BXH/7J1ABV
slay@netcom.com

Date: 2 Jun 1994 17:48:08 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!kabuki.EECS.Berkeley.EDU!
kennish@network.ucsd.edu
Subject: NICAD CHARGING
To: info-hams@ucsd.edu

In article <104.1664.2674.0N03BBAE@dragonbbs.com>,
Alan Eldridge <alan.eldridge@dragonbbs.com> wrote:
>For constant voltage (vs. constant current) nicad charging,
>what is the volt-per-cell setting?
>An excellant article on building a pulse battery charger was
>published in 73 magazine in the QRP column.
>I built it, it works great on gel cells, etc.
>The author states in the article you can use it for nicads, as
>long as you get the voltage setting right.
>Too low, you don't get a full charge, too high, you cook the cells.
>One source (The DF Handbook) recommend 1.43 V per cell. I've used
>that on several packs and have gotten a very shallow charge each time.
>I've done this right at the terminals, so I know I'm going right to
>the cells, not through a blocking diode.
>Any suggestions?
>

I have not read the 73 magazine article, so I can't comment specifically on it. However, in general, constant voltage charging of NiCad batteries is dangerous, unless the current is limited to some safe value.

NiCd batteries have a negative voltage coefficient with charge -- that

is, as the cell reaches full charge, the terminal voltage falls. This is the principle behind the deltaV fast chargers. As the cell reaches full charge, the temperature rises rapidly due to the internal oxygen cycle. This reduces the potential of the positive plate and the terminal voltage drops. If you are using a constant voltage (near zero impedance), this means that as the cell reaches full charge, and warms up, the cell voltage falls, and the current increases -- this leads to thermal runaway, and a vented cell (lost capacity) or in the worst case, boom.

Anyhow, the magic voltage is 1.48V +/- 0.05, which is the electrochemical potential of the cell when oxygen evolution at the positive plate occurs. At voltages above this, one needs to be careful of cell temperature. (the magic voltage has a temperature coefficient that depends on electrolyte and other factors, but should be accurate near 25C). This is the maximum voltage one can charge a NiCd cell without worrying about heating effects (i.e. oxygen evolution at the positive electrode).

Unfortunately, the positive electrode doesn't reach full charge at this voltage, and a considerable overvoltage is necessary to force the positive plate into its highest oxidation state -- the number 1.63 sticks in my mind. This of course, means that some degree of oxygen evolution is necessary to reach a charge. Floating a cell at 1.63V will result in disaster as it will overheat and vent. This is why constant current charging is recommended. You automatically get a balance between the oxygen cycle and cell temperature and cell voltage.

You mention pulse charging -- these are usually pseudo constant current devices. The pulsed current is delta temperature driven. Start with a high current, and as the cell warms, lower the peak current. You control the circuit by looking at the open circuit voltage during the off phase of the peak. Unfortunately, there is no formula for the cutoff voltage, as the OCV during charge fractions of a second after the charging pulse is removed is very dependent on cell geometry (concentration and mixing effects). There is a European patent on this method: 0 311 460 (A2), Norvik Inc. 10.10.88

Good luck.

Ken

Date: 2 Jun 94 19:25:19 GMT
From: dog.ee.lbl.gov!ihnp4.ucsd.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet@ucbvax.berkeley.edu
Subject: RE:Loop Antenna

To: info-hams@ucsd.edu

In <1994Jun2.175404.6920@news.vanderbilt.edu>, PFEIFFEM@ctrvx1.Vanderbilt.Edu (PFEIFFEM_1) writes:

>Tom,

> Just don't forget that any compact antenna will NEVER outperform a full-sized antenna. You MAY get the antenna to accept power but that's where it will stay! Just a dummy load in the air!!

> The periodicals are great about telling you just how much fun you can have building small and cheap but they don't say just how it compares to the real thing.

> Good DX,

> K5WIM

>

>

>

>

There are exceptions to the rule than full-size is always better. Suppose you compare a low-lying full-size dipole with a tuned loop. The loop can be >80% efficient, and with vertical polarization has lower angle of radiation. If rotated, it won't have null areas like the dipole. Thus it may outperform the full-size dipole.

Once I compared with an attic dipole (20 ft up) and a home-made loop (6 ft up, 3.5 ft diameter) on 17m. While ordinarily there was little difference in signal strengths, there was a large difference when the band was closing. Namely stations that could be heard comfortably with the loop were buried in noise with the dipole.

In another example, our shortened Butternut beam behaves much better than an oversized Butternut vertical on 20m. The beam, which shows little directivity if any on 20m, is not only slightly louder but has much lower noise. Both antennas are at more or less the same height.

So a larger antenna has a better potential, but it also could be matched and sometimes outperformed by much smaller antennas.

Ignacy Misztal

E-mail: ignacy@uiuc.edu

University Of Illinois

tel. (217) 244-3164

Ham radio: N09E, SP8FWB

1207 W. Gregory Dr., Urbana, IL 61801, USA

Fax: (217) 333-8286

Date: 1 Jun 94 21:44:07 GMT

From: uchinews!ncar!gatech!howland.reston.ans.net!news.ans.net!

newstf01.cr1.aol.com!search01.news.aol.com!not-for-mail@rsch.wisc.edu

Subject: Software
To: info-hams@ucsd.edu

I was wondering if anyone has a copy of software, to connect a mac to a HAM radio. I had heard about some Apple 2 programs for sale but I was looking for a shareware or other type of mac program. Any help is appreciated

Thanks,
Jeff

Date: Thu, 2 Jun 1994 07:24:40 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!newsfeed.pitt.edu!dsinc!netnews.upenn.edu!msuinfo!harbinger.cc.monash.edu.au!trlluna!titan!shiva!handers@network.ucsd.edu
Subject: Speech Processor
To: info-hams@ucsd.edu

I am looking for a cct diagram &/or service manual for a Datong Model ASP speech processor. If anyone has one they would be able to let me have a copy of, I would be most appreciative, & would, of course, happily defray copying/postage costs. Thanks in anticipation.
Howard Anders
VK3AYV

Date: 2 Jun 94 18:20:46 GMT
From: sdd.hp.com!col.hp.com!srngenprp!bsplaine@hplabs.hpl.hp.com
Subject: TI9JJJ / QSL
To: info-hams@ucsd.edu

: but I'm glad he's now got a U.S. mail drop going.

Did I miss something? What is the new QSL address?

--
/\
 \ Bill Splaine E-MAIL > bsplaine@sr.hp.com /
 / ALL STANDARD DISCLAIMERS APPLY PACKET > N6GHG@KC6PJW \
 \\/\

Date: 2 Jun 1994 19:57:06 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!vixen.cso.uiuc.edu!

usenet@network.ucsd.edu
To: info-hams@ucsd.edu

References <1994Jun2.175404.6920@news.vanderbilt.edu>,
<2slbmV\$3rt@vixen.cso.uiuc.edu>, <hawley.770585983@aries>
Reply-To : ignacy@uiuc.edu (Ignacy Misztal)
Subject : Re: Loop Antenna

Have you ever visited W9YH? The club on White/Wright, across from
Beckam, is usually lively on Friday evenings. We have a new TS-850.

| | |
|-------------------------|--|
| Ignacy Misztal | Ham radio: N09E, SP8FWB |
| E-mail: ignacy@uiuc.edu | |
| University Of Illinois | 1207 W. Gregory Dr., Urbana, IL 61801, USA |
| tel. (217) 244-3164 | Fax: (217) 333-8286 |

Date: 2 Jun 1994 19:55:10 GMT
From: ihnp4.ucsd.edu!swrinde!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet@network.ucsd.edu
To: info-hams@ucsd.edu

References <1994Jun2.175404.6920@news.vanderbilt.edu>,
<2slbmV\$3rt@vixen.cso.uiuc.edu>, <hawley.770585983@aries>
Reply-To : ignacy@uiuc.edu (Ignacy Misztal)
Subject : Re: Loop Antenna

In <hawley.770585983@aries>, hawley@aries.scs.uiuc.edu (Chuck Hawley) writes:
>What's the pattern of a small loop? How does it matter if you turn it
>horizontal or vertical? Most of the ads show the AEA horizontal, and
>the MFJ vertical.

If I well remember, a horizontal loop is an omnidirectional cloud
warmer if horizontal and close to ground. The take-off angle lowers
as the height increases. The pattern of a vertical loop is
cardioid, similar to that of a dipole. I believe a QST published
loop radiation curves a few years ago.

| | |
|-------------------------|--|
| Ignacy Misztal | Ham radio: N09E, SP8FWB |
| E-mail: ignacy@uiuc.edu | |
| University Of Illinois | 1207 W. Gregory Dr., Urbana, IL 61801, USA |
| tel. (217) 244-3164 | Fax: (217) 333-8286 |

End of Info-Hams Digest V94 #612
